

Survey About Threats and Conservation Needs for Fish and Wildlife Habitats in Indiana

Summary of Results – Kankakee (Region 2)

DNR

Indiana Department
of Natural Resources



INDIANA DIVISION OF
FISH & WILDLIFE

PURDUE
UNIVERSITY



FORESTRY
AND
NATURAL
RESOURCES

Section III: Threats to Fish and Wildlife Habitats

11. How would you describe the **overall quality** of fish and wildlife habitats within **HABITAT** in Kankakee (Region 2)?
(Check only one)

	Very Poor		Poor		Satisfactory		Good		Very good		I don't know		Total Responses
	%	N	%	N	%	N	%	N	%	N	%	N	
Aquatic systems	0.0	0	42.9	9	33.3	7	19.0	4	4.8	1	0.0	0	21
Agricultural lands	15.0	3	60.0	12	10.0	2	15.0	3	0.0	0	0.0	0	20
Barren lands	0.0	0	100.0	1	0.0	0	0.0	0	0.0	0	0.0	0	1
Developed Lands	0.0	0	57.1	4	28.6	2	0.0	0	14.3	1	0.0	0	7
Forests	7.1	1	42.9	6	35.7	5	14.3	2	0.0	0	0.0	0	14
Grasslands	9.5	2	38.1	8	38.1	8	14.3	3	0.0	0	0.0	0	21
Subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	4.8	1	38.1	8	33.3	7	23.8	5	0.0	0	0.0	0	21
Total	6.7	7	45.7	48	29.5	31	16.2	17	1.9	2	0.0	0	105

12. How would you describe the total amount and overall quality of fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) since 2005? (Check one for each line item)

Amount of fish and wildlife habitats within HABITAT since 2005

	Increase		About the same		Decrease		I don't know		Total Responses
	N		N		N		N		
Aquatic systems	28.6	6	57.1	12	14.3	3	0.0	0	21
Agricultural lands	15.0	3	30.0	6	55.0	11	0.0	0	20
Barren lands	0.0	0	0.0	0	100.0	1	0.0	0	1
Developed Lands	37.5	3	37.5	3	25.0	2	0.0	0	8
Forests	0.0	0	42.9	6	50.0	7	7.1	1	14
Grasslands	54.5	12	18.2	4	27.3	6	0.0	0	22
Subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	33.3	7	33.3	7	33.3	7	0.0	0	21
Total	29.0	31	35.5	38	34.6	37	0.9	1	107

Quality of fish and wildlife habitats within HABITAT since 2005

	Increase		About the same		Decrease		I don't know		Total Responses
	N		N		N		N		
Aquatic systems	28.6	6	57.1	12	14.3	3	0.0	0	21
Agricultural lands	10.0	2	40.0	8	50.0	10	0.0	0	20
Barren lands	0	0	0	0	0	0	0	0	0
Developed Lands	37.5	3	37.5	3	25.0	2	0.0	0	8
Forests	7.1	1	42.9	6	42.9	6	7.1	1	14
Grasslands	38.1	8	19.0	4	42.9	9	0.0	0	21
Subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	23.8	5	28.6	6	47.6	10	0.0	0	21
Total	23.8	25	37.1	39	38.1	40	1.0	1	105

13. How would you predict about the total amount and overall quality of fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) over the next 10 years? (Check one for each line item)

Amount of fish and wildlife habitats within HABITAT over the next 10 years

	Increase		About the same		Decrease		I don't know		Total Responses
	N		N		N		N		
Aquatic systems	28.6	6	57.1	12	14.3	3	0.0	0	21
Agricultural lands	30.0	6	25.0	5	45.0	9	0.0	0	20
Barren lands	0.0	0	0.0	0	100.0	1	0.0	0	1
Developed Lands	12.5	1	50.0	4	37.5	3	0.0	0	8
Forests	7.1	1	28.6	4	57.1	8	7.1	1	14
Grasslands	27.3	6	40.9	9	27.3	6	4.5	1	22
Subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	23.8	5	33.3	7	42.9	9	0.0	0	21
Total	23.4	25	38.3	41	36.4	39	1.9	2	107

Quality of fish and wildlife habitats within HABITAT over the next 10 years

Great Lakes (Region 1)	Increase		About the same		Decrease		I don't know		Total Responses
	N		N		N		N		
Aquatic systems	33.3	7	38.1	8	28.6	6	0.0	0	21
Agricultural lands	15.0	3	40.0	8	45.0	9	0.0	0	20
Barren lands	0	0	0	0	0	0	0	0	0
Developed Lands	25.0	2	25.0	2	50.0	4	0.0	0	8
Forests	14.3	2	14.3	2	64.3	9	7.1	1	14
Grasslands	27.3	6	31.8	7	36.4	8	4.5	1	22
Subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Wetlands	19.0	4	28.6	6	52.4	11	0.0	0	21
Total	22.6	24	31.1	33	44.3	47	1.9	2	106

14. **Currently**, to what extent do you think the following general categories of threats **apply** to fish and wildlife habitats within **HABITAT** in Kankakee (Region 2)? (Check one for each line item)

<i>Great Lakes (Region 1)</i>	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses
	N		N		N		N		N		
Residential and commercial development	38.8	40	43.7	45	15.5	16	1.0	1	1.0	1	103
Agriculture and aquaculture	62.5	65	23.1	24	9.6	10	3.8	4	1.0	1	104
Energy production and mining	7.8	8	15.5	16	37.9	39	30.1	31	8.7	9	103
Transportation and service corridors	12.4	13	36.2	38	41.9	44	6.7	7	2.9	3	105
Biological resource use	9.6	10	13.5	14	49.0	51	22.1	23	5.8	6	104
Human intrusion and disturbance	32.7	34	39.4	41	22.1	23	2.9	3	2.9	3	104
Natural systems modifications	41.3	43	36.5	38	17.3	18	1.9	2	2.9	3	104
Invasives and other problematic species and genes	57.7	60	28.8	30	10.6	11	1.9	2	1.0	1	104
Pollution	18.3	19	40.4	42	28.8	30	2.9	3	9.6	10	104
Climate change and severe weather	24.0	25	38.5	40	20.2	21	8.7	9	8.7	9	104
Other stressors	12.9	12	31.2	29	31.2	29	7.5	7	17.2	16	93

15. You indicated a number of general categories as significant or moderate threats to fish and wildlife habitats within **HABITAT** in Kankakee (Region 2). Please indicate which of the following are specific threats to fish and wildlife habitats within HABITAT in Kankakee (Region 2) and their trends over the next 10 years. You may add additional threats you think are important using the “Other, please specify” option.

Residential and Commercial Development

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?								
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Housing and urban areas	43.9	36	41.5	34	11.0	9	2.4	2	1.2	1	82	76.6	59	18.2	14	0.0	0	5.2	4	77
Commercial and industrial areas	35.0	28	38.8	31	22.5	18	1.3	1	2.5	2	80	69.3	52	21.3	16	0.0	0	9.3	7	75
Tourism and recreation areas (e.g., sites with a substantial footprint – golf courses, campgrounds, etc.)	7.4	6	29.6	24	54.3	44	6.2	5	2.5	2	81	35.1	27	51.9	40	0.0	0	13.0	10	77

Other responses listed:

Response text:	N
fish and wildlife restricting sportsmans land use needlessly	1
increase in predators	1
non point contaminants	1
Total responses:	3

Agriculture and Aquaculture

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?								
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Annual and perennial nontimber crops	55.8	48	25.6	22	14.0	12	3.5	3	1.2	1	86	63.0	51	32.1	26	0.0	0	4.9	4	81
Wood and pulp plantations	0.0	0	10.6	9	35.3	30	38.8	33	15.3	13	85	5.1	4	69.6	55	1.3	1	24.1	19	79
Livestock farming and ranching	15.1	13	41.9	36	26.7	23	14.0	12	2.3	2	86	32.5	26	55.0	44	5.0	4	7.5	6	80
Aquaculture	0.0	0	6.0	5	28.6	24	35.7	30	29.8	25	84	3.8	3	52.6	41	0.0	0	43.6	34	78
Conversion of habitat to annual crops	61.2	52	24.7	21	10.6	9	1.2	1	2.4	2	85	71.6	58	23.5	19	0.0	0	4.9	4	81

Other responses listed:

Response text:	N
Total responses:	0

Energy Production and Mining

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know			Increase		Remain the same		Decrease		I don't know			
	N		N		N		N		N		Total Responses	N		N		N		N		Total Responses	
Oil and gas drilling	18.2	4	4.5	1	54.5	12	18.2	4	4.5	1	22	30.0	6	60.0	12	0.0	0	10.0	2	20	
Mining and quarrying	13.6	3	9.1	2	59.1	13	13.6	3	4.5	1	22	26.3	5	63.2	12	0.0	0	10.5	2	19	
Renewable energy production	27.3	6	45.5	10	18.2	4	4.5	1	4.5	1	22	60.0	12	30.0	6	0.0	0	10.0	2	20	
Fossil fuel energy production	13.6	3	18.2	4	45.5	10	18.2	4	4.5	1	22	20.0	4	65.0	13	5.0	1	10.0	2	20	
Shale gas development (e.g., fracking)	18.2	4	9.1	2	45.5	10	18.2	4	9.1	2	22	20.0	4	60.0	12	0.0	0	20.0	4	20	

Other responses listed:

Response text:	N
Fish and Wildlifes restricting sportsmans land use needlessly	1
Total responses:	1

Transportation and Service Corridors

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?										How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Roads and railroads	38.0	19	52.0	26	10.0	5	0.0	0	0.0	0	50	69.4	34	30.6	15	0.0	0	0.0	0	49
Utility and service lines	12.0	6	58.0	29	28.0	14	2.0	1	0.0	0	50	63.3	31	36.7	18	0.0	0	0.0	0	49
Flight paths	0.0	0	12.0	6	36.0	18	38.0	19	14.0	7	50	8.2	4	71.4	35	0.0	0	20.4	10	49
Shipping lanes	2.0	1	4.1	2	14.3	7	61.2	30	18.4	9	49	0.0	0	75.0	36	0.0	0	25.0	12	48

Other responses listed:

Response text:	N
Because of the decline in fossil fuels, I think the transportation issues will decrease.	1
Total responses:	1

Biological Resource Use

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?										How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Forestry practices (e.g., silvicultural methods leading to the lack of early successional habitat)	21.7	5	34.8	8	17.4	4	17.4	4	8.7	2	23	36.4	8	50.0	11	0.0	0	13.6	3	22

Other responses listed:

Response text:	N
Because of less fossil fuel people will burn wood more.	1
Total responses:	1

Human Intrusion and Disturbance

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?										How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Recreation activities (e.g., ATVs, trail use, horseback riding, high-speed boating, canoeing)	20.5	15	53.4	39	17.8	13	8.2	6	0.0	0	73	58.6	41	41.4	29	0.0	0	0.0	0	70

Other responses listed:

Response text:	N
fish and wildlife restricting sportsmans access needlessly	1
Less significance because of expense of fossil fuels	1
urban sprawl	1
Total responses:	3

Natural Systems Modification

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses	
	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N	N				
Dams and water management/use	25.6	20	29.5	23	28.2	22	11.5	9	5.1	4	78	48.6	34	41.4	29	0.0	0	10.0	7	70	
Fire and fire suppression	24.7	19	24.7	19	26.0	20	15.6	12	9.1	7	77	28.6	20	57.1	40	1.4	1	12.9	9	70	
Log jam removal	16.7	13	28.2	22	23.1	18	25.6	20	6.4	5	78	21.4	15	58.6	41	1.4	1	18.6	13	70	

Over-mowing of natural areas	21.8	17	42.3	33	23.1	18	6.4	5	6.4	5	78	30.6	22	59.7	43	1.4	1	8.3	6	72
Conversion of natural habitats to other land uses	72.7	56	20.8	16	5.2	4	1.3	1	0.0	0	77	72.2	52	25.0	18	2.8	2	0.0	0	72

Other responses listed:

Response text:	N
cOAL MINE RECLAMATIONIS BECOMING MORE ENVIORNMENTALY DESTRUCTIVE.	1
fish and wildlife restricting sportsmans access needlessly	1
I want to be optimistic and say that people will catch on to what is happening to the environment.	1
over restrictive policies	1
Total responses:	4

Invasives and Other Problematic Species/Genes

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses	
	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N	N	N			
Invasive/alien species	71.8	61	27.1	23	1.2	1	0.0	0	0.0	0	85	91.3	73	6.3	5	1.3	1	1.3	1	80	
Problematic native species (e.g. overabundant native deer or algae)	20.9	18	37.2	32	30.2	26	10.5	9	1.2	1	86	45.8	38	50.6	42	0.0	0	3.6	3	83	
Plant diseases	8.0	7	29.9	26	26.4	23	9.2	8	26.4	23	87	28.9	24	33.7	28	.0	0	37.3	31	83	
Introduced genetic material (such as crop, seed stock, biocontrol, stocked/released species, etc.)	10.5	9	36.0	31	31.4	27	3.5	3	18.6	16	86	47.0	39	28.9	24	0.0	0	24.1	20	83	

Other responses listed:

Response text:	N
All these issues are significant because of our addiction to GMO's, Insecticides, etc.	1
Beavers, geese	1
non-local genotype seed	1
Total responses:	3

Pollution

Great Lakes (Region 1)	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?									
	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses	
	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N	N	N			
Runoff from roads/service corridors	33.9	20	47.5	28	16.9	10	0.0	0	1.7	1	59	62.1	36	32.8	19	0.0	0	5.2	3	58	
Chemical spills	22.0	13	33.9	20	39.0	23	.0	0	5.1	3	59	36.8	21	49.1	28	.0	0	14.0	8	57	

Point source pollution from commercial/industrial sources	25.9	15	53.4	31	17.2	10	.0	0	3.4	2	58	43.1	25	44.8	26	3.4	2	8.6	5	58
Air pollution (e.g., smoke, mercury emissions)	25.4	15	25.4	15	40.7	24	0.0	0	8.5	5	59	34.5	20	50.0	29	1.7	1	13.8	8	58
Household sewage and urban water waste	15.3	9	42.4	25	32.2	19	3.4	2	6.8	4	59	37.9	22	48.3	28	3.4	2	10.3	6	58
Agriculture, residential, and forestry effluents	40.7	24	42.4	25	15.3	9	0.0	0	1.7	1	59	62.1	36	27.6	16	1.7	1	8.6	5	58
Garbage and solid waste	18.6	11	37.3	22	39.0	23	1.7	1	3.4	2	59	41.4	24	50.0	29	1.7	1	6.9	4	58
Excess energy (e.g., noise/light pollution, warm water discharge, etc.)	20.7	12	27.6	16	37.9	22	8.6	5	5.2	3	58	35.1	20	52.6	30	1.8	1	10.5	6	57

Other responses listed:

Response text:	N
These issues will decrease as the populace develops an ethic about these issues and demands reform.	1
Total responses:	1

Climate Change and Severe Weather

	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?											How will the significance of this threat change over the next 10 years?								
<i>Great Lakes (Region 1)</i>	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N	N	N	N	N	N	N	N	N	N		N	N	N	N	N	N	N	N	
Changing frequency, duration, and intensity of drought	46.0	29	42.9	27	7.9	5	0.0	0	3.2	2	63	86.4	51	5.1	3	0.0	0	8.5	5	59
Changing frequency, duration, and intensity of floods	51.6	32	38.7	24	6.5	4	0.0	0	3.2	2	62	86.0	49	5.3	3	0.0	0	8.8	5	57
Shifting and alteration of habitats due to climate change	30.2	19	54.0	34	12.7	8	0.0	0	3.2	2	63	86.4	51	5.1	3	0.0	0	8.5	5	59
Temperature extremes	26.2	16	52.5	32	19.7	12	0.0	0	1.6	1	61	86.0	49	5.3	3	0.0	0	8.8	5	57
Shifting seasons/phenology	30.2	19	47.6	30	17.5	11	0.0	0	4.8	3	63	81.4	48	10.2	6	0.0	0	8.5	5	59

Other responses listed:

Response text:	N
Because of Climate Change, all these issues will increase.	0
Total responses:	1

Other Stressors

	To what extent is this issue a current threat to fish and wildlife habitats within HABITAT in Kankakee (Region 2)?										How will the significance of this threat change over the next 10 years?									
<i>Great Lakes (Region 1)</i>	Significant threat		Moderate Threat		Minor Threat		Not a threat		I don't know		Total Responses	Increase		Remain the same		Decrease		I don't know		Total Responses
	N		N		N		N		N			N		N		N		N		
Low genetic diversity (due to reduced population size, species inbreeding, etc.)	23.1	9	41.0	16	23.1	9	7.7	3	5.1	2	39	52.8	19	36.1	13	0.0	0	11.1	4	36
Diseases	18.2	6	51.5	17	18.2	6	3.0	1	9.1	3	33	46.7	14	26.7	8	0.0	0	26.7	8	30

Other responses listed:

Response text:	N
Increases will happen until there is public outcry.	1
lack of habitat	1
less use of state land due to restriction use needlessly	1
Total responses:	1

16. Please use the box below to indicate other **emerging/anticipated** threats over the next 10 years to fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) that have not been previously identified. Please provide **specific examples** of the emerging/anticipated threats that you indicate.

Response text:	N
The growing disconnect between people and natural systems inhibits the ability of the public to make informed decisions related to natural resources. More conservation education is needed to increase the public's knowledge, experiences and skills to result in informed decisions, a commitment and constructive actions for wildlife resources.	5
As with AG lands (previously described) a main threat is loss of CRP grasslands due to high conversion to corn production for ethanol. Another issue is the timing of mowing for pasture and human-associated grasslands. Summer mowing should be timed to allow for successful nesting of species like Bobolinks.	1
Climate change and invasive species will likely interact in the future to reduce habitat quality even further. Wetlands, which already have issues with invasive species, will decline in quality / /	1
Failing tile systems may increase. Chronic Wasting Disease in deer exists 60-100 miles into Illinois; could spread into this region.	1
For invertebrates, the use of neonicotinoid seed treatments is quite possibly killing off a significant portion of all insect life near and in crop fields.	1
impacts from confined animal feedlot operations	1
Invasive species - already out of control on natural lands in the region will increase with the impacts of climate change / / Fire suppression on publically owned lands decreases that habitat value to both game and non-game species. So many state listed species would benefit from large tracts of protected lands that included NATIVE (not planted) early successional habitats as a significant part of the habitat mix. / /	1
Lack of public understanding of the importance of wetland habitats and maintaining high quality wetland habitats.	1
Possibility of Wind Turbines in Newton County, disrupting migratory bird and bat travel patterns, and potential for mortality of such species. Significant threat. Likely to increase over the next 10 years.	1
Solar UV exposure to all animals. / Bloom time adjustment for host plants for various species. / Available water supply for all species, plants and animals.	1
The primary reason for loss of wildlife habitat in AG lands in this region is loss of conservation set-asides such as CRP. this is driven by the high price of land for corn production, associated with ethanol. As long as private landowners withdraw conservation lands to plant more corn ,we are going to see losses.	1
Threat of CWD entering Indiana from Illinois. Threat of more wind farms in NW Indiana. Water table issues due to irrigation and confined livestock facilities.	1
Windfarm expansion impacts. / Removal of fences and windbreaks	1
Total Responses:	17

Section IV: Conservation Actions for Fish and Wildlife Habitats

Directions:

When responding to the questions in this section, please think about conservation actions for fish and wildlife habitats within **HABITAT** in Kankakee (Region 2).

17. Please indicate (1) the importance of the following general categories of conservation actions for fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) over the next 10 years, and (2) considering your responsibility within your agency/organization, whether you have taken a general category of conservation actions for fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) since 2005 or have plans to do so.

	To what extent do you think this category of conservation action is important for fish and wildlife habitats within HABITAT in Kankakee (Region 2) over the next 10 years?										Have you taken (since 2005) or do you currently plan to take conservation actions in this category for fish and wildlife habitats within HABITAT in Kankakee (Region 2)?							
<i>Great Lakes (Region 1)</i>	Very Important N		Moderately Important N		Somewhat Important N		Not Important N		I don't know N		Total Responses	Yes N		No N		I don't know N		Total Responses
Land/water protection	73.5	75	19.6	20	6.9	7	0.0	0	0.0	0	102	70.4	57	14.8	12	14.8	12	81
Land/water/species management	79.4	81	17.6	18	2.9	3	.0	0	.0	0	102	88.9	72	3.7	3	7.4	6	81
Education and awareness	53.4	55	35.9	37	10.7	11	.0	0	0.0	0	103	81.5	66	7.4	6	11.1	9	81
Law and policy	41.6	42	42.6	43	10.9	11	1.0	1	4.0	4	101	30.4	24	38.0	30	31.6	25	79
Livelihood, economic, and other incentives	26.7	27	50.5	51	15.8	16	1.0	1	5.9	6	101	31.6	25	36.7	29	31.6	25	79
External capacity building	37.0	37	30.0	30	22.0	22	1.0	1	10.0	10	100	32.1	26	30.9	25	37.0	30	81

18. You indicated that in your opinion conservation actions relating to the following general categories would be very or moderately important for fish and wildlife habitats within **HABITAT** in Kankakee (Region 2) over the next 10 years. Please indicate the importance of the following specific conservation actions within these general categories for fish and wildlife habitats within HABITAT in Kankakee (Region 2). You may add additional conservation actions you think are important using the “Other, please specify” option. (Check one for each line item)

Land/Water Protection

<i>Great Lakes (Region 1)</i>	Very important N		Moderately important N		Somewhat important N		Not important N		I don't know N		Total Responses
Acquire currently unprotected aquatic systems (manage and/or educate for easement habitat values)	68.4	13	26.3	5	5.3	1	0.0	0	0.0	0	19
Acquire currently unprotected barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Acquire currently unprotected forests	63.6	7	27.3	3	9.1	1	0.0	0	0.0	0	11
Acquire currently unprotected grasslands	84.2	16	15.8	3	0.0	0	0.0	0	0.0	0	19
Acquire currently unprotected wetlands	95.0	19	5.0	1	0.0	0	0.0	0	0.0	0	20
Acquire currently unprotected subterranean habitats	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Preserve currently existing corridors	86.5	77	7.9	7	4.5	4	1.1	1	.0	0	89
Acquire conservation easements to protect important wildlife habitats	71.1	64	21.1	19	7.8	7	0.0	0	0.0	0	90
Reduce conversion to cropland	72.2	65	15.6	14	11.1	10	1.1	1	0.0	0	90
Build/strengthen CRP partnerships	46.7	42	34.4	31	10.0	9	6.7	6	2.2	2	90

Other responses listed:

Response text:	N
allow more not less use of state lands	1
Total responses:	1

Land/Water/Species Management

<i>Great Lakes (Region 1)</i>	Very important		Moderately important		Somewhat important		Not important		I don't know		Total Responses
	N		N		N		N		N		
Control invasive species in agricultural lands	41.2	7	47.1	8	5.9	1	5.9	1	0.0	0	17
Control invasive species in aquatic systems (e.g., Asian carp, zebra mussels, invasive aquatic plants)	60.0	12	25.0	5	10.0	2	5.0	1	0.0	0	20
Control invasive species in barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Control invasive species in developed lands	50.0	2	50.0	2	0.0	0	0.0	0	0.0	0	4
Control invasive species in forests	83.3	10	16.7	2	0.0	0	0.0	0	0.0	0	12
Control invasive species in grasslands	70.0	14	25.0	5	5.0	1	0.0	0	0.0	0	20
Control invasive species in wetlands	81.0	17	14.3	3	4.8	1	0.0	0	0.0	0	21
Control invasive species in subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Control problematic species (e.g., deer, raccoon, geese, domestic cat, feral hog) in agricultural lands	11.8	2	52.9	9	35.3	6	0.0	0	0.0	0	17
Control problematic native species in aquatic systems	20.0	4	30.0	6	45.0	9	5.0	1	0.0	0	20
Control problematic species (e.g., deer, raccoon, skunk, coyote, domestic cat, feral hog) in barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Control problematic species (e.g., deer, raccoon, geese, domestic cat, feral hog, exotic/aggressive vegetation) in developed lands	25.0	1	50.0	2	25.0	1	0.0	0	0.0	0	4
Control problematic species (e.g., deer, raccoon, domestic cat, feral hog) in forests	33.3	4	41.7	5	25.0	3	0.0	0	0.0	0	12
Control problematic species (e.g., raccoon, skunk, coyote, domestic cat) in grasslands	15.0	3	30.0	6	40.0	8	15.0	3	0.0	0	20
Control problematic species (e.g., deer, raccoon, domestic cat, feral hog, exotic/aggressive vegetation) in wetlands	28.6	6	47.6	10	19.0	4	4.8	1	0.0	0	21
Control problematic native species in subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dam removal	12.2	5	31.7	13	19.5	8	29.3	12	7.3	3	41
Decrease E. coli counts	15.8	6	26.3	10	36.8	14	10.5	4	10.5	4	38
Decrease number of combined sewer overflow events	29.3	12	41.5	17	12.2	5	12.2	5	4.9	2	41
Develop and promote farming technologies and practices that have conservation benefits (e.g., cover crops, no till)	63.0	58	26.1	24	9.8	9	1.1	1	0.0	0	92
Ex situ conservation (protection of a species outside of its natural habitat). Please	3.8	3	17.5	14	25.0	20	25.0	20	28.8	23	80

specify:											
Improve drainage management	38.0	35	42.4	39	13.0	12	4.3	4	2.2	2	92
Improve integrated pest management	29.4	5	41.2	7	17.6	3	11.8	2	0.0	0	17
Increase acres of riparian buffers	46.7	43	40.2	37	13.0	12	0.0	0	0.0	0	92
Increase acres enrolled in the Classified Forest and Wildlands Program	20.2	19	42.6	40	24.5	23	10.6	10	2.1	2	94
Link existing habitat blocks through corridor enhancement in agricultural lands	70.6	12	23.5	4	5.9	1	0.0	0	0.0	0	17
Link existing habitat blocks through corridor enhancement in aquatic systems	45.0	9	35.0	7	20.0	4	0.0	0	0.0	0	20
Link existing habitat blocks through corridor enhancement in barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Link existing habitat blocks through corridor enhancement in developed lands	75.0	3	25.0	1	0.0	0	0.0	0	0.0	0	4
Link existing habitat blocks through corridor enhancement in forests	58.3	7	33.3	4	0.0	0	8.3	1	0.0	0	12
Link existing habitat blocks through corridor enhancement in grasslands	65.0	13	20.0	4	10.0	2	5.0	1	0.0	0	20
Link existing habitat blocks through corridor enhancement in wetlands	61.9	13	28.6	6	9.5	2	0.0	0	0.0	0	21
Enhance corridors in subterranean systems	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Manage biofuel grasslands	10.8	4	32.4	12	32.4	12	16.2	6	8.1	3	37
Manage urban woodlots	75.0	3	25.0	1	0.0	0	0.0	0	0.0	0	4
Mine reclamation	6.9	5	4.2	3	20.8	15	47.2	34	20.8	15	72
Promote diversity of forest types and successional stages	41.7	5	33.3	4	8.3	1	16.7	2	0.0	0	12
Promote diversity of grassland types and successional stages	65.0	13	25.0	5	10.0	2	0.0	0	0.0	0	20
Promote diversity of wetland types and successional stages	57.1	12	33.3	7	9.5	2	0.0	0	0.0	0	21
Protect and enhance undeveloped shorelines	35.9	14	25.6	10	33.3	13	5.1	2	0.0	0	39
Protect natural water regimes (e.g., withdraws, warm-water discharge)	48.8	20	39.0	16	9.8	4	2.4	1	0.0	0	41
Protect adjacent buffer zones	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Reduce losses of fish and wildlife habitats (due to agriculture, urban sprawl, commercial development, etc.)	75.3	70	18.3	17	6.5	6	0.0	0	0.0	0	93
Reduce nutrient and toxin loads (e.g., heavy metals, pharmaceuticals, fertilizers, insecticides)	46.2	43	34.4	32	16.1	15	1.1	1	2.2	2	93
Reduce recreational overuse of aquatic systems	15.8	3	31.6	6	36.8	7	15.8	3	0.0	0	19
Reduce recreational overuse of forests	16.7	2	33.3	4	33.3	4	16.7	2	0.0	0	12
Reduce recreational overuse of grasslands	26.3	5	26.3	5	21.1	4	26.3	5	0.0	0	19
Reduce recreational overuse of wetlands	15.0	3	20.0	4	45.0	9	15.0	3	5.0	1	20
Reduce recreational overuse of subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Reduce stream bank erosion	45.0	9	45.0	9	10.0	2	0.0	0	0.0	0	20
Reduce stream head cutting	25.0	5	30.0	6	30.0	6	0.0	0	15.0	3	20
Reestablish natural disturbance regimes in barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Reestablish natural disturbance regimes in forests	41.7	5	41.7	5	16.7	2	0.0	0	0.0	0	12
Reestablish natural disturbance regimes in grasslands	80.0	16	20.0	4	0.0	0	0.0	0	0.0	0	20
Reestablish natural disturbance regimes in wetlands	52.4	11	33.3	7	9.5	2	0.0	0	4.8	1	21
Reestablish natural disturbance regimes in subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Remove log jams	5.0	1	20.0	4	45.0	9	30.0	6	0.0	0	20

Restore and integrate diversity of habitats into crop-production dominated landscapes	58.8	10	29.4	5	11.8	2	0.0	0	0.0	0	17
Restore and integrate diversity of habitats into developed landscapes	50.0	2	50.0	2	0.0	0	0.0	0	0.0	0	4
Restore habitats and natural systems in aquatic systems	55.0	11	35.0	7	10.0	2	0.0	0	0.0	0	20
Restore habitats and natural systems in barren lands	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
Restore habitats and natural systems in forests	58.3	7	33.3	4	8.3	1	0.0	0	0.0	0	12
Restore habitats and natural systems in grasslands	95.0	19	5.0	1	0.0	0	0.0	0	0.0	0	20
Restore habitats and natural systems in wetlands	85.7	18	9.5	2	4.8	1	0.0	0	0.0	0	21
Restore habitats and natural systems in subterranean systems	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Species reintroduction. Please specify:	29.0	9	16.1	5	22.6	7	12.9	4	19.4	6	31

Ex situ conservation

Response text	N
Pheasant	2
maintain wetland remediation within the local	1
not preferable	1
should be discouraged	1
Total responses:	5

Species reintroduction listed by respondents:

Response text:	N
enhance T/E spp	2
Total Responses:	2

Other responses listed:

Response text:	N
Yes, Keystone Species, in particular whether they be fauna or flora.	1
Total Responses:	1

Education and Awareness

<i>Great Lakes (Region 1)</i>	Very important		Moderately important		Somewhat important		Not important		I don't know		Total Responses
	N		N		N		N		N		
Educational programs in general	47.7	42	46.6	41	5.7	5	0.0	0	.0	0	88
Educational programs specifically for K-12	29.9	26	54.0	47	16.1	14	0.0	0	0.0	0	87
Improvement of signage and other communication materials in conservation areas	21.8	19	50.6	44	24.1	21	3.4	3	0.0	0	87
Training programs for stakeholders	42.0	37	45.5	40	8.0	7	3.4	3	1.1	1	88

Other responses listed:

Response text:	N
get public to support conservation and resource mgmt	1

Get public to support grassland conservation	1
Get public to support wetland conservation and mgmt	1
get public to value grassland habitat	1
get public to value resources	1
get public to value wetland resources	1
tolerance of other users	1
Total responses:	7

Law and Policy

Great Lakes (Region 1)	Very important		Moderately important		Somewhat important		Not important		I don't know		Total Responses
	N		N		N		N		N		
Increase regulations on invasive species	51.9	41	34.2	27	12.7	10	1.3	1	0.0	0	79
Change current laws, policies, and regulations. Please specify:	19.1	13	32.4	22	13.2	9	2.9	2	32.4	22	68
Set private sector standards and codes	15.4	12	32.1	25	29.5	23	6.4	5	16.7	13	78
Improve compliance with and enforcement of current policies	48.1	38	38.0	30	12.7	10	0.0	0	1.3	1	79
Reduce urban sprawl through planning and zoning	52.5	42	27.5	22	17.5	14	2.5	2	0.0	0	80
Establish legal lake levels	16.7	3	38.9	7	44.4	8	0.0	0	0.0	0	18
Establish rules and guidelines for piers and other structures	22.2	4	33.3	6	33.3	6	11.1	2	0.0	0	18
Increase compliance of existing rules and regulations for aquatic systems	50.0	9	33.3	6	16.7	3	0.0	0	0.0	0	18
Establish submergent vegetation control guidelines	27.8	5	50.0	9	16.7	3	5.6	1	0.0	0	18

Change current laws, policies, and regulations responses:

Response text	N
Allow more fenced hunting	1
Ban the sale of known invasive exotic species.	1
enact law to better fund grassland conservation and mgmt	1
enact law to increase funding for conservation and habitat mgmt	1
improve conservation setaside programs	1
Kankakee River drainage policies - dredged and straightened is not always the fastest way to move water	1
Log jam removal rules	1
nursery sales	1
Turtle harvest regulations need to be stricter	1
Total responses	9

Other responses listed:

Response text	N
Total responses:	0

Livelihood, Economic, and Other Incentives

<i>Great Lakes (Region 1)</i>	Very important		Moderately important		Somewhat important		Not important		I don't know		Total Responses
	N		N		N		N		N		
Link natural resources to livelihoods through nature tourism	27.4	20	41.1	30	27.4	20	2.7	2	1.4	1	73
Support substitution of alternatives for environmentally harmful products and processes	28.8	21	49.3	36	13.7	10	1.4	1	6.8	5	73
Promote market forces (e.g., creation of a nitrogen trading market, promotion of alternative agricultural markets) as a tool for conservation	11.1	8	47.2	34	26.4	19	5.6	4	9.7	7	72
Promote conservation payment programs (e.g., payment for ecosystem services, conservation easements)	56.2	41	32.9	24	9.6	7	0.0	0	1.4	1	73
Promote nonmonetary values of natural systems within the state	59.7	43	29.2	21	11.1	8	.0	0	0.0	0	72
Manage recreational opportunities to be compatible with fish and wildlife habitats	69.4	50	18.1	13	9.7	7	2.8	2	0.0	0	72

Other responses listed:

Response text	N
I am not in favor of mitigation or trading markets.	1
promote private hunting preserves to reduce stress on free range wildlife	1
use less restrictions on users of state lands	1
Total responses:	3

External Capacity Building

<i>Great Lakes (Region 1)</i>	Very important		Moderately important		Somewhat important		Not important		I don't know		Total Responses
	N		N		N		N		N		
Develop institutions and civil society	11.1	7	44.4	28	28.6	18	3.2	2	12.7	8	63
Develop alliances and partnerships (e.g., between producers, landowners, and conservation professionals)	65.1	41	28.6	18	6.3	4	0.0	0	0.0	0	63
Strengthen conservation financing	77.8	49	17.5	11	4.8	3	0.0	0	0.0	0	63
Increase state's capacity for research and monitoring of conservation actions	60.3	38	23.8	15	15.9	10	0.0	0	0.0	0	63
Promote green infrastructure	36.5	23	42.9	27	15.9	10	1.6	1	3.2	2	63
Promote use of research and science in conservation decision-making processes	58.1	36	27.4	17	11.3	7	3.2	2	0.0	0	62

Other responses listed:

Response text	N
increase the amount of state lands open to all sportsmen	1
Total responses:	1